WHAT IS CLAIMED IS:

1. A method for manufacturing a heat resistant resin film with a metal thin film, comprising the steps of:

biasing a conductive material to one surface of the heat resistant resin film; and

applying electrolytic plating to the heat resistant resin film by using the conductive material biased to the one surface of the heat resistant resin film as an electrode to form a metal thin film on the heat resistant resin film.

2. The method according to claim 1, wherein the step of biasing uses a difference in specific gravity between the heat resistant resin and the conductive material.

3. The method according to claim 2, wherein the use of the difference in specific gravity between the heat resistant resin and the conductive material is a centrifugal molding method in which at least one of an inorganic conductive material and an organic conductive material is subjected to gradient molding.

4. The method according to claim 2, wherein the use of the difference in specific gravity between the heat resistant resin and the conductive material is dipping in which at least one of an inorganic conductive material and an organic conductive material is collected near the one surface.

5. The method according to claim 1, further comprising the steps of etching the one surface of the heat resistant resin so that the conductive material existing near the one surface acts as an electrode,

wherein the etching is one of abrasion, sandblasting, and chemical etching.

6. The method according to claim 1, wherein the conductive material is metal particles.

7. The method according to claim 1, wherein the conductive material is organic conductive polymer.

8. The method according to claim 1, wherein the heat resistant resin is a heat resistant resin having polyimide as a main component.

9. A heat resistant resin film with a metal thin film, wherein the metal thin film is formed by applying electrolytic plating to the heat resistant resin film by using a conductive material biased to one surface of the heat resistant resin film as an electrode.

10. The heat resistant resin film according to claim 9, wherein the conductive material biased to the one surface of the heat resistant resin film is biased by using a difference in specific gravity between the heat resistant resin and the conductive material.

11. The heat resistant resin film according to claim 10, wherein the conductive material biased to the one surface of the heat resistant resin film by using the difference in specific gravity between the heat resistant resin and the conductive material is biased by centrifugal molding.

12. The heat resistant resin film according to claim 10, wherein the conductive material biased to the one surface of the heat resistant resin film by using the difference in

specific gravity between the heat resistant resin and the conductive material is biased by dipping.

13. The heat resistant resin film according to claim 9,

wherein the one surface of the heat resistant resin is etched so that the conductive material existing near the one surface acts as an electrode; and

wherein the etching is one of abrasion, sandblasting, and chemical etching.

14. The heat resistant resin film according to claim 9, wherein the conductive material is metal particles.

15. The heat resistant resin film according to claim 9, wherein the conductive material is organic conductive polymer.

16. The heat resistant resin film according to claim 9, wherein the heat resistant resin is heat resistant resin having polyimide as a main component.

17. A method for manufacturing an endless belt comprising the steps of forming the heat resistant resin film according to claim 1 into an endless shape.

18. The method according to claim 17, wherein the metal thin film generates heat due to electromagnetic induction heating.

10/10648

19. An endless belt, wherein the heat resistant resin film according to claim 1 is formed into an endless shape.

20. The endless belt according to claim 19, wherein the metal thin film generates heat due to electromagnetic induction heating.

21. An image forming apparatus comprising:

an image carrier formed a latent image based on a difference in electrostatic potential on a surface thereof;

a developing unit by which powdered toner including thermoplastic resin is made to adhere to the image carrier to visualize the latent image;

an intermediate transferor to which a toner image formed

on the image carrier is transferred temporarily; and

transfer fixing unit for heating the toner image on the intermediate transferor and for bringing the melted toner image into compression bonding to a recording medium when the toner image is melted,

wherein the intermediate transferor is an endless belt according to claim 20; and

the transfer fixing unit includes an electromagnetic induction coil disposed in opposition to the intermediate transferor.

22. The method according to claim 3, further comprising the steps of mixing the heat resistant resin and a plurality of kinds of materials having a difference in specific gravity from each other,

wherein at least one of the plurality kinds of materials is a conductive material.

23. The method according to claim 22, wherein the plurality kinds of materials are different in particle size from one another.

24. The heat resistant resin film according to claim 11, wherein the plurality kinds of materials having a difference in specific gravity from each other are dispersed in the heat resistant resin; and

at least one of the plurality kinds of dispersed materials is a conductive material.

25. The heat resistant resin film according to claim 24, wherein the plurality kinds of materials dispersed in the heat resistant resin are different in particle size from one another.